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ENTREPRENEURSHIP AND SOCIAL INNOVATION IN TRAINING AND HUMAN CAPITAL DEVELOPMENT: THE CASE OF THE BANK PALMAS ¹

This study aimed to analyze an entrepreneurial experience, social innovation and human capital; the object of the study is the Bank Palmas, located in Fortaleza, in Ceará, Brazil. This bank was created to address the need to promote the income generation and job, making use of a corporate economic system, which allows to overcome the poverty axis located in a suburb called Conjunto Palmeiras, with a population of 30 thousand inhabitants. For this, we used the descriptive and exploratory research with fieldwork conducted in the locality of Bank Palmas. These actions serve as a benchmark for innovative practices and have meaningful participation and involvement of local inhabitants. A population sample consisted of 207 individuals, associates and employees of the Bank Palmas and was used to analyze the descriptive and inferential statistics. The data suggest that the entrepreneurship development concepts and social innovation and human capital are implemented by the Bank Palmas with relevant results in the local community. Members and employees of the Bank Palmas through these various actions felt themselves as active players in transforming their reality. Investment in human development is considered as a major source of innovation, the organizations of various sectors of the economy need to incorporate the strategic management of human capital, as recommended in the literature on this topic, which considers the human capital as the set of all the skills, knowledge and experience of employees or managers, involving also the creativity and innovation.

Keywords: entrepreneurship, social innovation, human capital, bank Palmas

1. Introduction

The Community Banks of experiments show that it is financial innovation activities and supportive nature of Entrepreneurship, developed a web of associations and community characteristics, which is intended to promote labor activities and income generation from the point of view of reorganization of the economies sites. The aim of the Bank Palmas is to induce the development of territories with low incomes through the creation of local production partnerships and consumption based on the support of solidarity savings initiatives in its various areas such as: the productive social enterprises, service delivery to support the most diverse lines of business marketing in-

itiatives (grocery stores, gas stations, shops and corporate fairs), as well as the organization of the production chain of producers and consumers on low incomes from Palmeiras set community.

According to [1], the first Brazilian Community Bank was the Palmas Bank, opened in January 1998 in conjunction Palmeiras, a poor neighborhood in material terms, with about 30,000 inhabitants, located on the outskirts of the city of Fortaleza (EC). According to the authors, their creation came from the Association of the residents of the Palmeiras together and soon had a progressive membership of community residents. These community members decided, by a collective decision to create in place an economic system with a micro-credit line for entrepreneurs and local consumers. Incentive mechanisms for local consumption were creating credit and a social currency, to-

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gether with innovative ways of trading as fairs and popular and solidarity shops, boosting locally, creating new jobs and consequent yield increase for a significant number of people.

The fundamental aim of this study is to verify if there was the development of human capital of the members and employees of the Bank Palmas, in Fortaleza-CE community, from the deployment of a joint savings bank based on the principles of Entrepreneurship and Social Innovation. So, this is taken into account the following questions: I) With the actions promoted by the Bank Palmas was the development of human capital in the Palmeiras set community? II) With the Bank Palmas, there were positive impacts through their actions in Entrepreneurship and Social Innovation and Human Capital?

2. Entrepreneurship and Social Innovation

Not now that it has sought to define the concept of entrepreneurship and the job has not been without difficulties, because of the various meanings that have been attributed to the term and its use in different contexts and under different perspectives [2].

The word of Entrepreneurship comes from the French, bringing together the words «between» and «hold», which can be interpreted as «being in the market between the supplier and the consumer» [3, p.26–27].

According to the [4], the entrepreneur word is used as an adjective or noun, and is synonymous with active, bold, resourceful, dynamic, hardworking and antonym of down, stopped or lazy.

According to [5], it was in the seventeenth century that the concept acquired its recent meaning. The term «entrepreneur» was used to describe people who bought the raw materials, the transformed and then the traded. The symbolic meaning of entrepreneur, then, was the person who, sensing an opportunity to market, challenged the risks, making a decision to transform and resell feedstock and identified the costs, but not the profit margins [5].

According to [3, p. 32], the Entrepreneurship is a «process of creating and / or expanding businesses that are innovative or born from identified opportunities,» not being closed to innovation and admitting the choice or market information for profit. As you can see, through innovation we can give rise to an income creation process [2].

Entrepreneurship is seen as a set of processes that involve many elements as opportunities, proactive people, risk, innovation and enterprise and that can lead to new values, new products and processes, start-ups, growth and hence profit [6].

Furthermore, [3] argues that the entrepreneur's role is to catalyze the possibilities that may arise due to some urgent needs and find them an own goal, making a demand or offer, an idea or product innovation in management processes or innovative actions.

It is understood, so innovation — a term derived from the Latin *in + novare*, which in Portuguese means «new make» — does not designate only, new procedures, products, services or conceptions, but also a new attitude in terms of management in its ability to creatively turn new concepts into practical *modi operandi*. Innovation relates to new products, new business models, new services and couple the ideas of the discovery of new definitions and new management techniques [7].

According to [8, p.16], the entrepreneur's figure is the «creative personality, always dealing better with the unknown, creating the likelihood of the possibilities, transforming chaos into harmony.» The entrepreneur is continually facing the future; rarely stand in the present and never last.

Among the various forms of entrepreneurship, there is the Social Entrepreneurship, which deals with the social market and in society has its main focus of performance. It is characterized for being innovative, focused on the social area, based activity in an innovative and plausible idea of effective, focused solutions to a particular occurrence that encompasses many people or parts of a locality and instigate a social impact with results concrete. Social entrepreneurs have the action strategy community involvement with government and with the company [9].

Social Entrepreneurship is defined, according to [9, p.170], as «an art and a science, a new paradigm and a new process of technology innovation and social management, and self-organizing inducer social to the fight against poverty, social exclusion through the promotion of solidarity and social emancipation, human development, and the empowerment of citizens, the capital, with a view to integrated and sustainable local development».

Therefore, social entrepreneurs are defined as people who create «innovative solutions to social problems and causing changes in society» [3, p. 32]. According to [10], Social Entrepreneurship advocates are those who have a strong penchant for creating social value through innovation and not only by capital strength. Must, above all have creativity and the ability to remake their fields. Social entrepreneurs can be considered precursors of innovation and solutions to social challenges; They can not stop to turn all the *modi operandi* of communities [10]. The concept of Social Innovation

has been used to describe a wide range of ideas without a clear demarcation of the concept. In the design of [11, p. 73], the Social Innovation can result from looking for answers to social needs, with a «new way of doing things», and a «new way of dealing with the phenomenon of poverty.»

In view [13], all the innovation includes the application of new and original ideas, or, on the other hand, the reapplication since old ideas, using new and different ways in order to find the solutions required needs. For him, innovation is a cumulative and inclusive process where all work in the same direction and where, essentially, the ideas are realized, shared, tested, refined and applied.

According to [14], it is a difficult task to find a consensus definition of social innovation. So [15] proposes that we view Social Innovation as any new action or process that aims to improve the quality of life of a community or society. According to the authors, there are three crucial elements in Social Innovation:

- Better ways of community service;
- The willingness / ability of a community to be permeable to new ideas and practices;
- Community development approaches capable of solving social problems across sectors and disciplines.

For its part, [13] defines it as any other kind of innovation, Social Innovation is nothing more than a collective process involving various social agents such as social organizations, enterprises, service users, competitors, politicians, financiers, among others.

Still on the definition of Social Innovation, [16] report that an innovation suit naming Social Innovation as the innovative idea has the potential to improve the quality of service or the very quality of life. In the opinion of these authors, social innovations include the changes in the culture of society (whether legal level or traditions), in order to strengthen the power of empowerment of society, while qualifying their social and economic performance.

Regarding the applicability of Social Innovation and sustainability and further research on the two fundamental dimensions of this area, environmental and social (inequality), [17] warns of the long-term idea that imposes itself with involvement in decision-making mechanisms and management. The author argues that the real management challenges are the creation of forms of social organization that allows citizens to influence what truly matters, how to generate more rational decision-making, rather than worrying about the invention of faster chips or more efficient arms, for example.

But dealing with change is not easy for managers and all other assets of the organization. According to [18], the process of change requires, first, the internalization, by the entire organization, that we must deal with change, and, concomitantly, to create receptivity for it, building it to that researchers call «organized abandonment» system of products / projects.

3. Human capital

In recent times, the term Human Capital has been the subject of attention in various scientific studies and works, in various areas of knowledge, such as management, economics, psychology, law, social and political science, and related areas to health and education.

Adam Smith referred to the Human Capital already in 1776, however the term was only established in 1961 by Theodore Schultz (1902–1998), an American economist, who drew attention to the fact that return on investment in human capital through education and training of workers was much higher than investment in physical capital of the company [19].

In his article, Investment in Human Capital, [20] provides that «economists have long known that people are an important part of the wealth of nations» and that the productive capacity of the human being is greater than all the riches. Advocates also that financial resources to the education and training of individuals in organizations increase productivity and hence allow the achievement of positive rates of return. Investment in human capital through education and professionalization, produces an untouchable feature.

Increased skills, providing by high levels of education, is an important factor in an individual's productivity increase. This productivity increase is then responsible for the increased income earned during active life. This fact is confirmed by [21], which states that people with higher levels of education tend to earn more income than the other.

The importance of human capital in the economy of nations is established as additional source of productivity, given the machinery and land, and then advocated, and whose investment, centered on the person, it would be reciprocated in the future as profit [22].

The training and vocational training, formal education, including primary education, studies for adult programs, secondary and higher, representing corporate investment in human beings, in their ability to progress in pay, in the progress of quality people's lives and in raising and training of human capital, with the increase in the value of productivity [20].

It is understood by the human capital set of knowledge, experience and expertise as well as organizational innovation. Briefly, human capital is everything that people bring with them at the end of each training action [2].

As stated [23, p.69–70], «The most valuable of all capital is that invested in a human being.» The in human capital investment efforts are critical because they allow organizations to a clear improvement of the level of training of its employees and technicians, thus increasing their satisfaction and their level of empowerment, which is reflected in the levels of quality and development of entrepreneurship among segments that are involved.

4. Methodology

The methodology can be defined as a path, a combination of steps and procedures that must be covered systematically in the analysis of the occurrences [24], or «an associated research tactic is structured critically the research exercises, arising specifically on preference and connection methods and analysis and information gathering. «[25, p.129]. According to [26], the methodology underpins the collection of data to be used and decoded during the investigation.

In this research, an exploratory analysis was privileged that makes it possible to obtain new knowledge about the formation of human capital promoted by Bank Palmas. It turned up, too, the descriptive analysis, in that it was intended to understand, know, describe and list the contribution of Entrepreneurship and Social Innovation, Human Capital and Social Capital Palmeiras set for the city of Fortaleza.

4.1 Techniques of gathering and processing quantitative data

During the investigation, the data collection was based on different methods and research instruments, according to the specificity, the objectives, the type of information needed and the logistical and technical issues of the research. In the case of the collection of quantitative data, the questionnaire is an extremely useful measuring instrument [27], mainly because it's fast and there are no great financial outlay because it can be applied to multiple individuals at the same time, plus it avoids the distortion of the answers, with all the benefits arising from them. The questionnaire used was designed and applied to all (75.41 %) of associate members (companies / autonomous) Bank Palmas.

According to [28], questionnaires can be presented as open or closed. The questionnaire used in this research includes mainly closed questions, multiple choice, where the answers follow a Likert

scale to values from 1 to 5, where 1 is equivalent to the value «Not Enough» and 5 to «excellent» value.

The wording of the questions always took into account essential aspects such as the clarity and brevity of the questions, the use of simple language, operating ordering of issues, concise variant of the type of issues, coverage of all alternative answers (in case the objective questions) and the explanation of the relevance of each issue, aiming continuously with respect to the items surveyed.

After collecting the questionnaires, we went to the next step, which consisted of the compilation, analysis and reporting of data through statistical analysis software AMOS 19.0 and IBM/SPSS — 20.0 (Statistical Package for Social Sciences).

To test the null hypothesis that there is no relationship between the two variables in question, it appealed to the application of the statistical test Chi-square (χ^2) to be the most suitable for situations where there are, in sync with the following requirements [29].

- contingency tables order are equal to or greater than 2×2 (two rows and two columns);
- The sample is random;
- The sample size is equal to or greater than 30;
- The value per cell of the contingency table is equal to or greater than 5.

According to [30], Chi-square test of independence can only be strictly applied when all the following conditions:

- The sample size is greater than 20 observations;
- All E_{ij} (expected values) are higher than 1;
- At least 80 % of the expected values are greater than or equal to 5.

In the opinion of [31], the Mann-Whitney test is preferable to the T-Student test when there is a violation of normal or when the variables are ordinal level with two or more categories. This test aims to test the null hypothesis that two populations have the same distribution versus an alternative that follow different distributions, which is equivalent to testing that the population medians are equal.

The measurement model is assessed by confirmatory factor analysis (CFA). The use of AFC corresponds to an appropriate technique for checking for each construct that comprises the proposed model. The AFC is usually used as a tool for checking the validity of latent variables and the evaluation of measurement scales [32].

The research population consists of associates (companies / autonomous) local Bank Palmas and its employees, whose participation was voluntary, in that the subjects accepted the invitation to par-

ticipate in the research, respecting the ethical criteria. The sample was intentional and obeyed the criteria for their training.

5. Results and discussion

The purpose of this section is to analyze and present quantitative results that were obtained through questionnaires to members (companies / autonomous) and staff and the governing body of Bank Palmas. The sample consists of 26 functional employees and 181 associates (companies / independent) partners. It comes first, the descriptive results (tables of frequencies and measures of central tendency) and then the relationships between variables (Qui-quadrado¹ test, Mann-Whitney² U test and Kruskal-Wallis³) to check for statistically significant differences between the variables under consideration.

5.1. Associates (companies / independent) partners

According to Figure 1, the 181 members (companies / autonomous), 59 % are women and 41 % men.

Applying the chi-square test of independence ($\chi^2 = 18.696$, $gl = 4$, $P = 0.001$), as P is less than 0.05, it can be concluded that the income of associates (companies / autonomous) is significantly independent of the company's activity, ie, the yield is significantly different in the two types of activity; the higher yields predominate among associates (companies / independent) whose activity is trade, ie 52.4 % of members have higher wages, and lower wages are among the majority of members (companies / independent) exercising their activity in the service sector, which represents 29.5 % of members (Table 1).

To identify the underlying factors to different groups of issues that make up the questionnaire, we used the factor analysis explanatory, to perform linear combinations of several variables (loan, acceptance of currency, trade, labor, new businesses, entrepreneurial management, consumer and etc.) in order to obtain a smaller num-

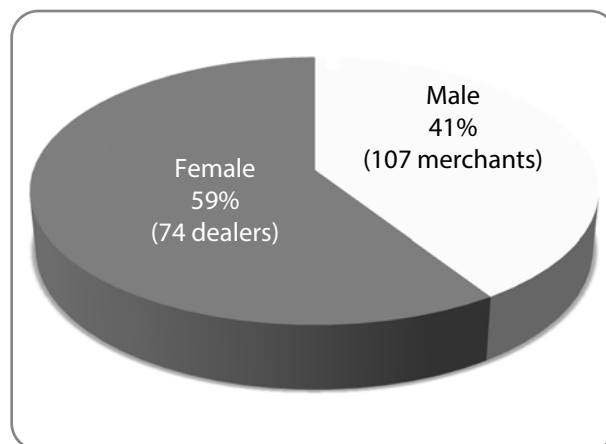


Fig. 1. Distribution of associates (companies / autonomous) by gender

Table 1

Frequency according to income activity

Income (minimum wages)	Activity		Total
	Trade	services	
Up to 5 minimum wages	17 (16,%)	15 (19,2 %)	32 (17,5 %)
Between 5 and 10	14 (13,6 %)	23 (29,5 %)	37 (20,4 %)
Between 10 and 15	18 (17,5 %)	21 (26,9 %)	39 (21,5 %)
15 to 20	27 (26,2 %)	5 (6,4 %)	32 (17,7 %)
Above 20	27 (26,2 %)	14 (17,9 %)	41 (22,7 %)
Total	103 (100 %)	78 (100 %)	181 (100 %)
Chi-square test	$\chi^2 = 18,696$; $gl = 4$; $P = 0,001$		

Table 2

Factors obtained from the exploratory factor analysis (EFA)

Factors	Description
F3	Entrepreneurial Management / Social Innovation
F4	Human Capital and Social Capital

ber of factors. Table 2 presents the factors obtained from the explanatory factor analysis, which demonstrated the existence of unifactorial structures, coinciding the questionnaire items with the respective factors.

Regarding the Entrepreneurial Management / Social Innovation, Human Capital and Social Capital and the time of association to the bank, there were no statistically significant differences, ie associates (companies / autonomous) evaluated substantially the same as the Palmas Bank, regardless of the number of years that are associated with the Palmas Bank, this statement is displayed in the middle of each order, because even with random differences, low and high orders are distributed approximately equivalent (Table 3). This was, moreover, identified by [1] that link two key traits that characterize the specificity of the phe-

¹ The chi-square test is a nonparametric test used for nominal or ordinal variables and whose distribution is away from the normal. This type of test checks whether there is a relationship between the variables and is based on probabilities or frequencies [33].

² The Mann-Whitney test is applied at the level of at least ordinal variables and also an alternative to the t-test. This test is used to test the hypothesis of equality with regard to a two-sample location parameter.

³ The Kruskal-Wallis test is applied at the level of at least ordinal variables and is also an alternative to One-Way-ANOVA. This test is used to test the hypothesis of equality regarding a location parameter of three or more samples.

Table 3

Comparison of the scale of satisfaction from Bank Palmas according to the associated time

Factors	Number of years associated (Years)	Average \pm DP	Average Orders	Kruskal Wallis Test
F3 — Entrepreneurial Management / Social Innovation	Up to 5	3,34 ($\pm 0,71$)	93,72	$\chi^2 = 0,880$
	6 to 10	3,27 ($\pm 0,64$)	86,29	$gl = 2$
	Above 10	3,22 ($\pm 0,81$)	85,22	$P = 0,644$
F4 — Human Capital and Social Capital	Up to 5	3,51 ($\pm 0,81$)	93,70	$\chi^2 = 2,870$
	6 to 10	3,50 ($\pm 0,71$)	89,85	$gl = 2$
	Above 10	3,06 ($\pm 0,72$)	63,39	$P = 0,238$

nomenon of social economy, from the perspective of sociology and economic anthropology, and open the way to its interpretation as a way of regulation: hybridization savings and the joint construction of supply and demand.

Figure 2 shows the values of standardized factor weights and the individual reliability of each of

the items in the model, and reveals that the variables (loans, acceptance of the currency, trade, labor, new business and entrepreneurial management) validate the practice of F3 factor—entrepreneurial management / social innovation.

The composite reliability of the 'Management Empreendedora / Social Innovation' factor is

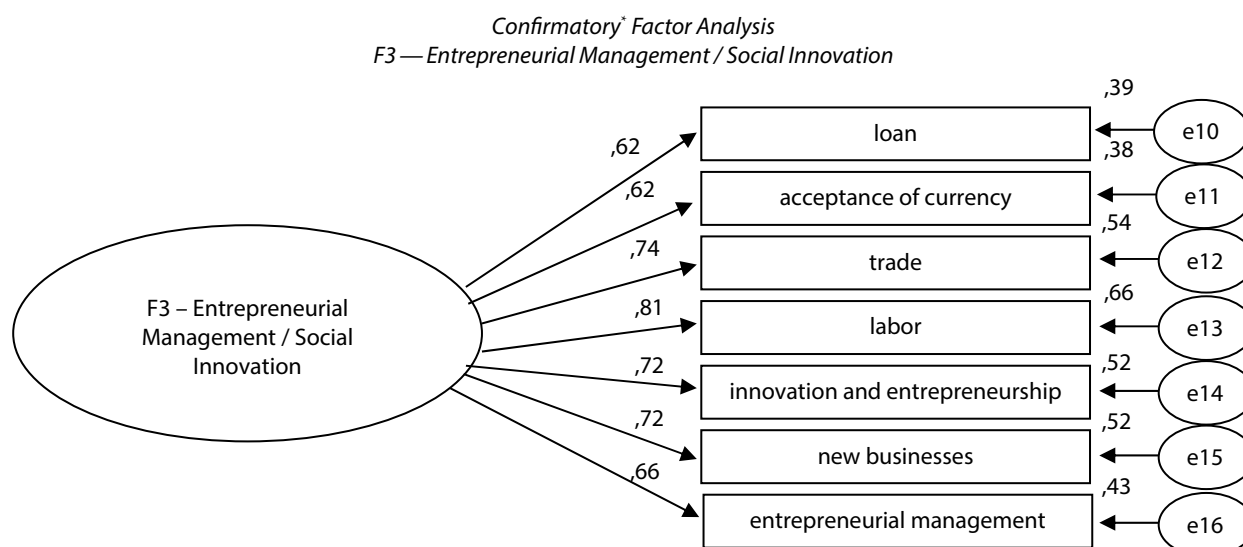


Fig. 2. Standardized factorial weights and individual reliability of each of the items of the factor 'Entrepreneurial Management / Social Innovation'

* ($X^2(7) = 187,175$; $p = ,000$; $x^2df = 13,370$; Comparative Adjustment Index — CFI = 0,738; Index Tuning Quality — GFI = 0,732; PCFI = 0,492; Parsimony Goodness-of-fit Index — PGFI = 0,366; Root Mean Square Error of Approximation — RMSEA = 0,262; Event Likelihood — $P(msea \leq 0,05) = ,000$; Akaike Information Criterion — AIC = 215,175; Criteria Brownie -Cudeck — BCC = 216,477; Cross-Validation Index — MECVI = 1,203)

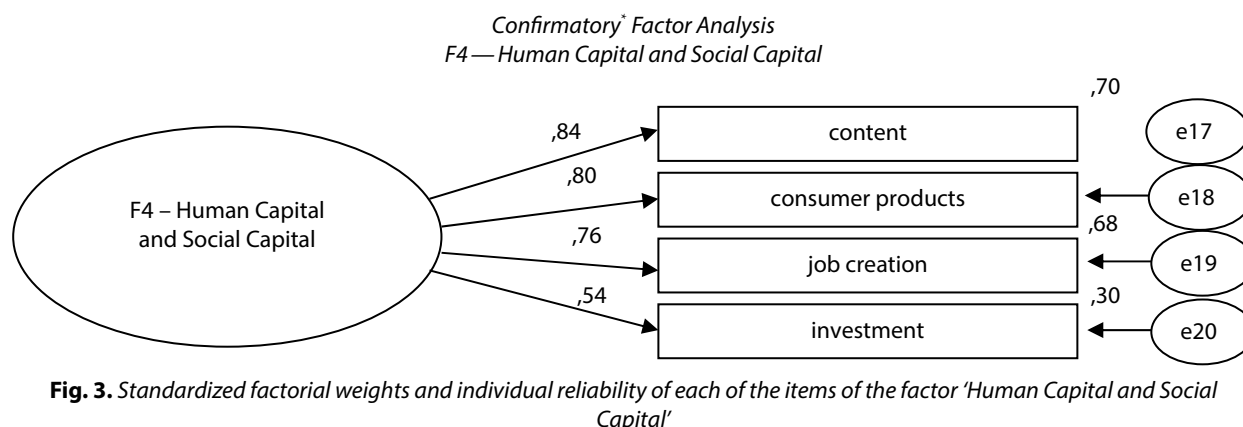


Fig. 3. Standardized factorial weights and individual reliability of each of the items of the factor 'Human Capital and Social Capital'

* $X^2(2) = 6,247$; $p = 0,044$; $x^2df = 3,123$; CFI = 0,984; GFI = 0,983; PCFI = 0,328; PGFI = 0,197; RMSEA = 0,109; $P(msea \leq 0,05) = 0,113$; AIC = 22,247; BCC = 22,704; MECVI = 0,126.

0.639, so the reliability of the construct is not appropriate ($FC \geq 0,7$).

The average variance extracted (AVE), an indicator of convergent validity of the factors, has proved successful, being 0.698 for the 'Entrepreneurial Management / Social Innovation' factor ($VEM \geq 0,5$).

Figure 3 presents the standardized values of the factor weights and individual reliability of each item in the model.

The composite reliability factor 'Human Capital and Social Capital' is 0.712, so the reliability of Construct is adequate.

The average variance extracted (AVE), an indicator of the convergent validity of the factors, has also proved suitable, being 0.555 for the 'Human Capital and Social Capital' factor ($VEM \geq 0,5$).

5.2. Functional Employees

According to Figure 4, the 26 employees, 54.8 % are men and 46.2 % women.

According to the Likert scale (Table 4), most employees considered the Entrepreneurial Management Bank Palmas as excellent or good, with the following distribution: assessment of entrepreneurial activities (Great—50 % and Good—26.9 %); Innovation and Social Entrepreneurship (good—46.2 % and great—38.5 %); quality of several courses in the areas of training conducted by the Bank (Great—34.6 % and Good—50 %), these training courses promote the development of human capital through training of employees. These data are in accordance with various theoretical studies.

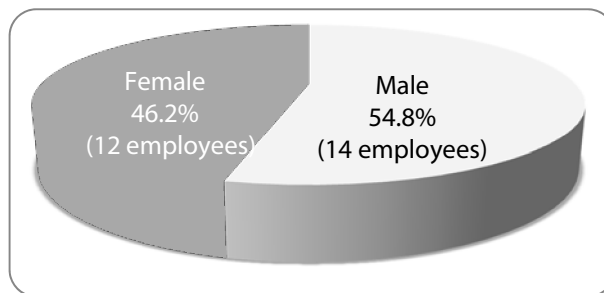


Fig. 4. Distribution of employees by gender

Indeed, according to [2], Human Capital is anything that people take with them to each end of a training professional achievement; to [3] theory of human capital has to be understood as knowledge and skills of people who can not be summarily excluded from theories of economic growth, or to be considered in the light of a simplistic look and generalist; to [7] states that the entrepreneur's role is to catalyze the opportunities that may arise due to some urgent needs, and explore them with an own goal, making the demand on offer, the idea or innovation in products, management innovative action; and [23] focuses on social innovation in people management and solution range for social issues.

According to the Likert scale, as can be seen from Table 5, the majority of employees assessed the role of the Bank Palmas, under the Human Capital and Social Capital, with great and good, observing the following distribution: training Human Capital and Social Capital (good—42.3 %; Great—34.6 %); development of human capital and social through the actions promoted by the

Table 4

Frequency distribution of the overall assessment of functional employees according to function in Bank Palmas — Entrepreneurial Management

items	Insuffi- cient	Regular	Good	Great	Excellent	Total	Average Orders	Kruskal Wallis Test
During that time working at Bank Palmas, evaluates entrepreneurial activities?								
Governing body		2 (40,0 %)	0 (0 %)	3 (60 %)	0 (0 %)	5 (100 %)	11,00	$\chi^2 = 2,864$ $gl = 2$ $P = 0,269$
Support services		0 (0 %)	3 (75 %)	1 (25 %)	0 (0 %)	4 (100 %)	9,50	
Technical		1 (5,9 %)	4 (25,3 %)	9 (52,9 %)	3 (17,6 %)	17 (100 %)	15,18	
Total		3 (11,5 %)	7 (26,9 %)	13 (50 %)	3 (11,5 %)	26 (100 %)		
Bank Palmas promoted innovation actions and Social Entrepreneurship?								
Governing body		0 (0 %)	1 (20 %)	3 (60 %)	1 (20 %)	5 (100 %)	17,60	$\chi^2 = 2,624$ $gl = 2$ $P = 0,277$
Support services		0 (0 %)	3 (75 %)	1 (25 %)	0 (0 %)	4 (100 %)	10,25	
Technical		1 (5,9 %)	8 (47,1 %)	6 (35,3 %)	2 (11,8 %)	17 (100 %)	13,06	
Total		1 (3,8 %)	12 (46,2 %)	10 (38,5 %)	3 (11,5 %)	26 (100 %)		
On the entrepreneurial management of the Bank Palmas in creating and offering various courses in the fields of training, how do you evaluate the quality of these offers?								
Governing body			2 (40 %)	2 (40 %)	1 (20 %)	5 (100 %)	14,90	$\chi^2 = 0,576$ $gl = 2$ $P = 0,751$
Support services			3 (75 %)	0 (0 %)	1 (25 %)	4 (100 %)	11,38	
Technical			8 (47,1 %)	7 (41,2 %)	2 (11,8 %)	17 (100 %)	13,59	
Total			13 (50 %)	9 (34,6 %)	4 (15,4 %)	26 (100 %)		

Table 5

Frequency distribution of the overall assessment of functional employees according to function in Bank Palmas — Human Capital and Social Capital

items	Insuffi- cient	Regular	Good	Great	Excellent	Total	Average Orders	Kruskal Wallis Test
Evaluates the formation of human capital and social capital promoted by Bank Palmas?								
Governing body		0 (0 %)	3 (60 %)	0 (0 %)	2 (40 %)	5 (100 %)	14,60	$\chi^2 = 0,479$ $gl = 2$ $P = 0,777$
Support services		1 (20 %)	1 (25 %)	2 (50 %)	0 (0 %)	4 (100 %)	11,38	
Technical		1 (5,9 %)	7 (41,2 %)	7 (41,2 %)	2 (11,8 %)	17 (100 %)	13,68	
Total		2 (7,7 %)	11 (42,3 %)	9 (34,6 %)	4 (15,4 %)	26 (100 %)		
There was development of human capital and social through the actions promoted by Bank Palmas?								
Governing body	1 (20 %)	1 (20 %)	0 (0 %)	1 (20 %)	2 (40 %)	5 (100 %)	14,60	$\chi^2 = 0,255$ $gl = 2$ $P = 0,889$
Support services	0 (0 %)	0 (0 %)	2 (50 %)	2 (50 %)	0 (0 %)	4 (100 %)	12,25	
Technical	1 (5,9 %)	0 (0 %)	5 (29,4 %)	11 (64,7 %)	0 (0 %)	17 (100 %)	13,47	
Total	2 (7,7 %)	1 (3,8 %)	7 (26,9 %)	14 (53,8 %)	2 (7,7 %)	26 (100 %)		
Against all actions implemented by the Bank Palmas with his microcredit policy, social inclusion, entrepreneurship and local development, how do you assess the Bank Palmas?								
Governing body		0 (0 %)	2 (40 %)	3 (60 %)	0 (0 %)	5 (100 %)	11,60	$\chi^2 = 0,741$ $gl = 2$ $P = 0,716$
Support services		0 (0 %)	1 (25 %)	2 (50 %)	1 (25 %)	4 (100 %)	15,50	
Technical		1 (5,9 %)	4 (23,5 %)	10 (58,8 %)	2 (11,8 %)	17 (100 %)	13,59	
Total		1 (3,8 %)	7 (26,9 %)	15 (57,7 %)	3 (11,5 %)	26 (100 %)		

Table 6

Kolmogorov-Smirnov test on the scale of satisfaction of employees functional legal representatives of the Palmas Bank

Factors	KS	gl	p
F3 — Entrepreneurial Management	0,159	26	0,088
F4 — Human Capital and Social Capital	0,173		0,044

bank (Great — 53.8 %, Good — 26.9 %); microcredit policy, social inclusion, entrepreneurship and local development (Great — 57.7 %, Good — 26.9 %). The Social Capital describes circumstances in which individuals can take advantage of their participation in groups and networks to achieve goals and benefits. So in addition to individual attribute, the capital is seen as a collective action component, activating social networks. Also [34] sees the third sector actions as social interventions that seek to change ways of thinking, acting and / or feel, and according to [1, p. 34] the «Integrated Microcredit is a supportive financial system, adapted to the reality of the community, which operates in an integrated manner in the four points of the production chain, namely»: solidary capital, sustainable production, ethical, fair trade. As stated [23, p. 69–70] “the most valuable of all capital is that invested in human being”.

Table 6 shows the application of the adhesion test to normal Kolmogorov-Smirnov, which revealed that the F3 factors (Entrepreneurial Management / Social Innovation) and F4 (Human Capital and Social Capital) follow a standard normal distribution. The application of this test was

necessary because of the small sample size, it is not possible to apply the non-parametric Mann-Whitney and Kruskal-Wallis.

5. Conclusion

Bank Palmas has contributed to the formation of the Entrepreneurship and Social Innovation of Human Capital and Social Capital in the community Palmeiras Set on the outskirts of Fortaleza in northeastern Brazil, constituting an inducer of sustainable local development through its training programs and professional training. In addition, the Palmas Bank developed its social role in the formation of its members, calling them in some areas of knowledge, and stimulating Entrepreneurship, Social Innovation and training of Human Capital and Social Capital in response to the needs of the community. Moreover, it has contributed to solutions to problems that should be the subject of governmental public policies in education, environment and economic development, among others. He found the training and courses sponsored by the Banco Palmas that are aimed to promote motivation, development of entrepreneurship and social innovation. In this regard, the institution has strengthened the training processes that generate human capital and developed the profile of entrepreneurs, resulting in what is known as social capital. From this research, it is desirable that other succeed him and that the academy can provide incentives for research in entrepreneurship and innovation field, training of Human Capital and Social Capital as a tool for transformation of society, especially in

outlying areas of the main economic centers, providing thus a policy of inclusion of the most vulnerable populations economically, culturally and socially.

Finally, the study identified some limitations such as the need for further deepening of market research on training courses and training offered;

qualification and employment, based on new business trend; and expansion of the frame members, breaking, if necessary, with the confining space of the territory of Palmeiras set; and to remedy the fault systematic data on former members who attended courses, training and capacity building, as the records indicate, just for the past few years.

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References

1. Melo Neto, J. J. & Magalhães, S. (2007). *Bairros pobres, ricas soluções: Bank Palmas ponto a ponto*. Fortaleza: Expressão Gráfica, 118.
2. Stewart, A. & Cotton, J. (2013). Making sense of entrepreneurship journals: Journal rankings and policy choices. *International Journal of Entrepreneurial Behavior & Research*, 19(3), 303–323.
3. Sarkar, S. (2010b). *Empreendedorismo e Inovação*. Lisboa: Escolar Editora, 414.
4. *Dicionário Houaiss de sinónimos e antónimos da língua portuguesa*. (2003). (1ª Ed.). Rio de Janeiro: Objetiva Editora, 953.
5. Filion, L. J. (1999). Diferença entre sistemas gerenciais de empreendedores e operadores de pequenos negócios. *Revista Administração de Empresa*, 39(4), outubro/dezembro, 6–20.
6. Lages, M. F. S. (2010). *Espírito Empreendedor dos Técnicos de Diagnóstico e Terapêutica*. Dissertação de Mestrado. Universidade de Trás-os-Montes e Alto Douro, Vila Real, Portugal, 214.
7. Marques, C. S. (2004). *O impacto da inovação no desempenho económico-financeiro das empresas industriais portuguesas*. Tese de Doutoramento, Departamento de Economia, Sociologia e Gestão — Universidade de Trás-os-Montes e Alto Douro, Vila Real, Portugal.
8. Gupta, P. (2009). *Inovação Empresarial no século XXI — Versão executiva*. Porto: Vida Económica.
9. Oliveira, E. M. (2008). *Empreendedorismo Social: da teoria à prática, do sonho à realidade: ferramentas e estratégias*. Rio de Janeiro: Qualitymark.
10. Vieira, L. (2005). *Cidadania e globalização*. (4a ed.). Rio de Janeiro: Record, 403.
11. Taylor, J. (1970). Introducing Social Innovation. *The Journal of Applied Behavioral Science*, 6(6), 69–77.
12. Gabor, D. (1970). *Innovation: Scientific, technological, and social*. New York: Oxford University Press, 113.
13. Leadbeater, C. (2014). *The Frugal Innovator: Creating Change on a Shoestring Budget*. London and New York: Palgrave Macmillan, 203.
14. Henley, M. (2008). *Success in social innovation in South Australia. What has happened, what has worked? Uniting Care Wesley Adelaide*. Retrieved from: <http://www.unisa.edu.au>. (date of access: 17.04.2014).
15. André, I. & Abreu, A. (2006). Dimensões e espaços da Inovação Social. *Finisterra*, XLI, 81, 121–141.
16. Pol, E. & Ville, S. (2009). Social innovation: buzz word or enduring term? *Journal of Socio-Economics*, 38(6), 878–885.
17. Dowbor, L. (2013). O uso inteligente de crédito. In: *Bank Palmas 15 anos: resistindo e inovando*. NESOL-USP. São Paulo: A9 Eitora, 25–34.
18. Drucker, P. F., Senge, P. M. & Shaw, G. B. (2013). Challenges in Change Management in Central Banks. *Journal of Central Banking Theory and Practice*, 2, 35–49.
19. Baron A., & Armstrong, M. (2007). *Gestão do Capital Humano: gerar valor acrescentado através das pessoas*. Lisboa: Piaget, 266.
20. Schultz, T. W. (1961, March). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
21. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education*. (3rd ed.). New York: The University of Chicago Press, 412.
22. Frank, J. V. (2012). *Expanding the Role of Maryland Community Colleges in K-12 Teacher Preparation: Benefits and Costs of Implementing the Associate of Arts in Teaching (AAT) Degree*. Retrieved from: <http://dx.doi.org/10.1787/871641300584>. (date of access: September, 2015).
23. Fonseca, M. (1995). O Banco Mundial e a educação brasileira: uma experiência de cooperação internacional. In Oliveira, Romualdo Portela Ed. *Políticas educacionais: impasses e alternativas*. São Paulo: Cortez, 144.
24. Ruiz, J. A. (2006). *Metodologia Científica: guia para eficiência nos estudos*. (5ª ed.). São Paulo: Atlas.
25. Silva, A., & Pinto, J. (1986). *Metodologia das Ciências Sociais*. Porto: Edições Afrontamento.
26. Leite, F. T. (2008). *Metodologia Científica: métodos e técnicas de pesquisa: monografias, dissertações, teses e livros*. Aparecida, SP: Idéias e Letras.
27. Fortin, M. (2003). *O Processo de Investigação*. (3ª ed.). Loures: Lusociência.
28. Ghiglione, R. & Matalon, B. (1993). *O Inquérito: Teoria e Prática*. Oeiras: Celta Editora.

29. Levin, J., (1987). *Elementary Statistics in Social Research*. (2nd Edition). New York: Harper and Row Publishers, Inc.
30. Marôco, J. (2003). *Análise estatística com utilização do SPSS*, (2ª Ed.). Lisboa: Edições Sílabo.
31. Pestana, M. & Gageiro, J. (2000). *Análise de dados para as Ciências Sociais: A complementaridade do SPSS*. (2ª ed. revista e aumentada). Lisboa: Edições Sílabo, 1240.
32. Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
33. Martinez, L. & Ferreira, A. (2010). *Análise de dados com SPSS — Primeiros passos*. Lisboa: Escolar Editora, 178.
34. Toro, J. B. (2000). O papel do Terceiro Setor em sociedade de baixa participação. E. B. Ioschpe. *3º Setor: desenvolvimento sustentado*. (2a ed.). São Paulo: Paz e Terra, 173.

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